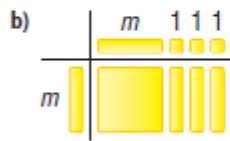
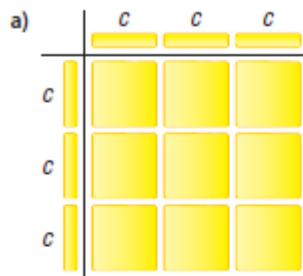
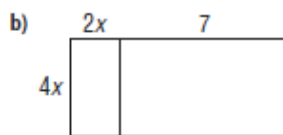
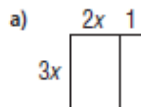


4. Write the multiplication sentence modelled by each set of algebra tiles.



5. For each set of algebra tiles in question 4, write a division sentence.

7. Write the multiplication sentence modelled by each rectangle.



8. For each rectangle in question 7, write a division sentence.

11. Multiply or divide as indicated.

a) $(2r)(-6r)$

b) $(-16n^2) \div (-8n)$

c) $(-5g)(7g)$

d) $\frac{40k}{-10k}$

e) $(9h)(3h)$

f) $\frac{48p^2}{12p}$

g) $18u^2 \div (-3u^2)$

h) $\frac{-24d^2}{-8d^2}$

16. Use any strategy to determine each quotient.

a) $\frac{10x^2 + 4x}{2x}$

b) $(6x^2 + 4x) \div x$

c) $\frac{6y + 3y^2}{3y}$

d) $\frac{40x^2 - 16x}{8x}$

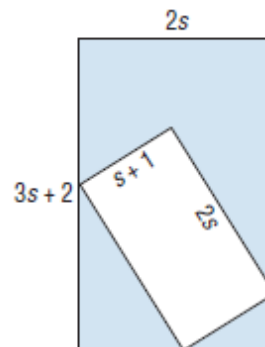
e) $\frac{15g - 10g^2}{5g}$

f) $\frac{-12k - 24k^2}{3k}$

g) $(24h^2 + 36h) \div (-4h)$

h) $(-8m^2 + 18m) \div (-2m)$

19. a) Write a polynomial to represent the area of each rectangle in the diagram below.



- b) Determine a polynomial for the shaded area. Justify your strategy.

- c) Determine the area in part b when $s = 2.5$ cm.

21. Determine each quotient.

a) $(12x^2 + 6xy) \div 3x$

b) $\frac{12gh + 6g}{2g}$

c) $(-27p^2 + 36pq) \div 9p$

d) $\frac{40rs - 35r}{-5r}$

e) $\frac{14n^2 + 42np}{-7n}$

23. a) The polynomial $54s^2$ represents the surface area of a cube. Determine a polynomial that represents the area of one face.
- b) Use your answer to part a. Determine the length of an edge of the cube.